

CLAIMS

[1] A manufacturing method of a transparent polypropylene based sheet that uses a resin composition containing: 70 to 99.8 mass% of a polypropylene resin (a) having an isotactic pentad fraction of 0.85 to 0.99 and a melt flow rate (MFR) of 0.1 to 30g/10min; and 30 to 0.02 mass % of a metallocene-type ethylene- α -olefin copolymer (b) that is produced using a metallocene catalyst and having a density of 880 to 920 kg/m³ and a melt flow rate (MFR) of 1 to 30g/10 min, the method comprising:

5 a melt extrusion step for melt-extruding the resin composition into a sheet-like shape;

10 a cooling step for quenching the melt-extruded sheet-like resin composition to obtain a sheet-like article; and

15 a heat treatment step for heat-treating the quenched sheet-like article at a heat treatment temperature of 100 to 220°C.

[2] The manufacturing method according to claim 1, wherein the polypropylene resin (a) and the metallocene-type ethylene- α -olefin copolymer (b) do not preferably contain a nucleating agent.

[3] The manufacturing method according to claim 1 or 2, wherein

20 the cooling step includes at least one of:

quenching the melt-extruded sheet-like resin composition by allowing the sheet-like resin composition to pass through a slit through which cooling water flows; and

25 quenching the melt-extruded sheet-like resin composition by allowing the sheet-like resin composition sheet to travel between and in contact with a cooling roller and an endless belt.

[4] The manufacturing method according to any one of claims 1 to 3, wherein, in the heat treatment step, front and back surfaces of the sheet-like article are held with a metallic endless belt and/or a metallic roller to heat the sheet-like article, the metallic endless belt and/or the metallic roller having a mirror-finished surface.

[5] A transparent polypropylene based sheet that uses a resin composition containing: 70 to 99.8 mass% of a polypropylene resin (a) having an isotactic pentad

fraction of 0.85 to 0.99 and a melt flow rate (MFR) of 0.1 to 30g/10min; and 30 to 0.02 mass % of a metallocene-type ethylene- α -olefin copolymer (b) that is produced using a metallocene catalyst and having a density of 880 to 920 kg/m³ and a melt flow rate (MFR) of 1 to 30g/10 min, wherein:

5 a tensile modulus of elasticity of an extruding direction (MD direction) is 1500 MPa or higher; and

a total haze H is represented by Equation (I) below with a thickness of the sheet being t [mm]:

(Equation 1)

$$10 H \leq 70t^2 - 30t + 6 \quad \dots(I)$$

[6] The transparent polypropylene based sheet according to claim 5, wherein an impact resistance at -5°C is 2000J/m or higher.